ESSENTIAL ELEMENTS: MATHEMATICS GRADE 3								
Michigan K-12 Standards for Mathematics	Essential Element*	Claim	Michigan Range of Complexity			Level assessed		
			High Complexity Level	Medium Complexity Level	Low Complexity Level			
Third Grade Mathematics Domain: Operations and Algebraic Thinking								
	CLUSTER: Represent and solve problems involving	multipl	lication and division		_			
<b>3.OA.1.</b> Interpret products of whole numbers, e.g., interpret $5 \times 7$ as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as $5 \times 7$ .								
<b>3.0A.2</b> . Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when $56$ objects are partitioned equally into $8$ shares, or as a number of shares when $56$ objects are partitioned into equal shares of $8$ objects each. For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$ .	<b>EE.3.OA.1-2</b> . Use repeated addition to find the total number of objects and determine the sum.	4	<b>EE.3.OA.H.1-2</b> The student can use repeated addition to find a sum.	<b>EE.3.OA.M.1-</b> 2 The student can add equal groups of objects to find the total sum of objects.	<b>EE.OA.3.L.1-2</b> The student can distinguish between more and less (fewer).	Classsroom/State		
<b>3.0A.3</b> . Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	Not applicable See EE.3.OA.1 and EE.5.NBT.5.		NA	NA	NA	NA		
<b>3.OA.4</b> . Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$ , $5 = \_ \div 3$ , $6 \times 6 = ?$	<b>EE.3.OA.4</b> . Solve addition and subtraction problems when result is unknown, limited to operands and results within 20.	1	<b>EE.3.OA.H.4</b> The student can solve addition and subtraction problems when the result is unknown (within 20).	<b>EE.3.OA.M.4</b> the student can solve addition and subtraction problems when the result is unknown (within 10).	<b>EE.3.OA.L.4</b> the student can recognize numbers 1-9.	Classsroom/State		
<b>3.0A.5.</b> Apply properties of operations as strategies to multiply and divide.9 Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$ , then $15 \times 2 = 30$ , or by $5 \times 2 = 10$ , then $3 \times 10 = 30$ . (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$ , one can find $8 \times 7$ as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$ . (Distributive property.)	Not applicable. See EE.N-CN.2.		NA	NA	NA	NA		
<b>3.OA.6.</b> Understand division as an unknown-factor problem. For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8.	Not applicable. See EE.5.NBT.6-7.		NA	NA	NA	NA		
	CLUSTER: Multiply and Divide w	ithin 10	00					
<b>3.OA.7.</b> Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$ , one knows $40 \div 5 = 8$ ) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.			NA	NA	NA	NA		
CLUS	TER: Solve problems involving the four operations, and id	entify a	nd explain patterns in arithmet					
<b>3.OA.8.</b> Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	<b>EE.3.OA.8.</b> Solve one-step real-world problems using addition or subtraction within 20.	4	<b>EE.3.OA.H.8</b> The student can solve one-step real-world problems using addition or subtraction with sums/differences within 20.	<b>EE.3.OA.M.8</b> The student can solve one-step real-world problems using addition or subtraction with sums/differences within 10.	<b>EE.3.OA.L.8</b> The student can use counting (up to 5) to solve realworld problems.	Classroom/State		
<b>3.OA.9</b> . Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.	<b>EE.3.OA.9</b> . Identify arithmetic patterns.	4	<b>EE.3.OA.H.9</b> The student can create, describe, and extend simple number patterns.	<b>EE.3.OA.M.9</b> The student can create, describe, and/or extend simple number patterns or patterns involving objects or symbols.	<b>EE.3.OA.L.9</b> The student can recognize <b>same</b> or <b>different</b> in a simple pattern involving objects or symbols.	Classroom/State		
	Third Grade Mathematics Domain: Number a	nd Ope	rations in Base 10					
CLUSTER: Use place value understanding and properties of operations to perform multi-digit arithmetic								

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<b>3.NBT.1.</b> Use place value understanding to round whole numbers to the nearest 10 or 100.	<b>EE.3.NBT.1.</b> Use decade numbers (10, 20, 30) as benchmarks to demonstrate understanding of place value					Classroom		
	for numbers 0–30.							
<b>3.NBT.2</b> . Fluently add and subtract within 1000 using strategies and algorithms based or place value, properties of operations, and/or the relationship between addition and subtraction.	<b>EE.3.NBT.2.</b> Demonstrate understanding of place value to tens.	1	<b>EE.3.NBT.H.2</b> The student can compose and decompose numbers to 30 using models of tens and ones.	<b>EE.3.NBT.M.2</b> The student can compose a number using models of tens.	<b>EE.3.NBT.L.2</b> The student can differentiate between <b>more</b> and <b>less</b> when given two sets of objects with extreme differences.	Classroom/State		
<b>3.NBT.3</b> . Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., $9 \times 80$ , $5 \times 60$ ) using strategies based on place value and properties of operations.	<b>EE.3.NBT.3.</b> Count by tens using models such as objects, base ten blocks, or money.	1	<b>EE.3.NBT.H.3</b> The student can count by tens to 100 using base ten blocks or money.	<b>EE.3.NBT.M.3</b> The student can count to 30, showing one-to-one correspondence.	<b>EE.3.NBT.L.3</b> The student can rote count to 10.	Classroom/State		
	Third Grade Mathematics Domain: Number ar	nd Ope	erations -Fractions					
	CLUSTER: Use place value understanding and properties of opera	tions to	perform multi-digit arithmetic					
<b>3.NF.1</b> . Understand a fraction 1/b as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size 1/b.								
<ul><li>3.NF.2. Understand a fraction as a number on the number line; represent fractions on a number line diagram.</li><li>3.NF.2.a. Represent a fraction 1/b on a number line diagram by defining the interval</li></ul>								
from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size 1/b and that the endpoint of the part based at 0 locates the number 1/b on the								
number line.  3.NF.2.b. Represent a fraction a/b on a number line diagram by marking off a lengths 1/b from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.								
<b>3.NF.3</b> . Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.	EE.3.NF.1–3. Differentiate a fractional part from a whole.	1	identify a unit fraction or use a model to represent a unit fraction (limited to one half and one fourth).	<b>EE.3.NF.M.1-3</b> The student can identify the difference between a whole object and one half of an object.	<b>EE.3.NF.L.1-3</b> The student can dfferentiate between a whole object and some of an object.	Classroom/State		
<b>3.NF.3.a</b> . Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.			J. J					
<b>3.NF.3.b</b> . Recognize and generate simple equivalent fractions, e.g., $1/2 = 2/4$ , $4/6 = 2/3$ . Explain why the fractions are equivalent, e.g., by using a visual fraction model.								
<b>3.NF.3.c.</b> Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: Express 3 in the form $3 = 3/1$ ; recognize that $6/1 = 6$ ; locate $4/4$ and 1 at the same point of a number line diagram.								
<b>3.NF.3.d</b> . Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols > =, or <, and justify the conclusions, e.g., by using a visual fraction model.								
	Third Grade Mathematics Domain: Meas	sureme	ent and Data					
CLUSTER: Solve	Problems involving measurement and estimation of interv	vals of	time, liquid volumes and masse	s of objects				
<b>3.MD.1.</b> Tell and write time to the nearest minute, and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.	<b>EE.3.MD.1.</b> Tell time to the hour on a digital clock	3	<b>EE.3.MD.H.1</b> The student can tell time to the hour on a digital clock.	<b>EE.3.MD.M.1</b> The student can identify the hour on a digital clock.	<b>EE.3.MD</b> .L.1 The student can recognize that a clock is used to measure time.	Classroom/State		
<b>3.MD.2.</b> Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l).13 Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same	<b>EE.3.MD.2</b> . Identify the appropriate measurement tool to solve one-step word problems involving mass and volume.	3	<b>EE.3.MD.H.2</b> The student can identify the standard units of measure for mass (limited to pounds) and liquid volume (limited to cups).	<b>EE.3.MD.M.2</b> The student can identify the standard tools to measure a solid (scale) and liquid (cup/s).	<b>EE.3.MD.L.2</b> The student can differentiate between a solid and a liquid.	Classroom/State		
CLUSTER: Represent and interpret data								

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special method and state of the properties of th							
\$\text{\$\t	several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs. For example, draw a bar			a bar graph or a picture to answer	recognize that a bar graph and a circle graph are tools to display	classify an object based on a shared attribute with another object (eating utensils, foods, pets, vehicles, cold weather	Classroom/State
AMD. 5. Neutral port of a set of the contract of solving real months of the contract of solving real months of the contract of solving real months of the contract of solving real-world and management of solving real-world and real-world problems.  USSTER Solving real-world and management of solving real-wo	halves and fourths of an inch. Show the data by making a line plot, where the horizontal		3	a ruler drawn as part of a graphic to measure length to the nearest	measure the length of an object using informal (non-standard) units (e.g., an object is the same length as three paper clips).	compare two objects with extreme differences in length to determine the <b>longe</b> r or <b>shorter</b>	Classroom/State
AMD 5.2. A figure with side length of I unit, called "s unit square," is said to have "one toper unit of airou, and can be used to minuture area.  AMD 5.2. A figure grow, which made never with whose purpose or growing by minuture in a control of airou, and can be used to minuture area.  AMD 7. In falled series to the operations of multiplication and addition.  AMD 7. In falled series to the operations of multiplication and addition.  AMD 7. In falled series to the operations of multiplication and addition.  AMD 7. In falled series to the operations of multiplication and addition.  AMD 7. In falled series to the operations of multiplication and addition.  AMD 7. In falled series to the operations of multiplication and control in the series is the same as visual be found by multiplying the side lengths. In the transit of software as visual be found by multiplying the side lengths.  AMD 7. In falled series to the operations of multiplication and manhermatical side problems, and representations are series to series to series the same as visual be found by multiplying the side lengths. In the same as visual be found by multiplying the side lengths.  AMD 7. In fall series in the same is a series of the same of recalling length with multiplications are controlled to the same and series of the same of the same and series of the same of the same and series of the sa	CLUSTER: GO	eometric measurement: understand concepts of area, and	l relate	area to multiplication and to a	ddition.		
3 MD 5.4. A support with side freging for 1 suit, palled? I suit any quory? is used to bewer do make a read of 12 stude of the same and surgicial control gape of overlaph by n unit.  Substitute of the same and surgicial control gape of overlaph by n unit.  Substitute of the same and surgicial control gape of overlaph by n unit.  Substitute of the same and surgicial control gape of overlaph by n unit.  Substitute of the same and surgicial control gape of overlaph by n unit.  Substitute of the same and surgicial control gape of overlaph by n unit.  Substitute of the same and surgicial control gape of overlaph by n unit.  Substitute of the same and surgicial control gape of overlaph by not unit.  Substitute of the same and surgicial control gape of overlaph by not unit pollution.  Substitute of the same and surgicial control gape of overlaph by not unit pollution.  Substitute of the same and surgicial control gape of overlaph by not unit pollution.  Substitute of the same and surgicial control gape of the same and surgi	3.MD.5. Recognize area as an attribute of plane figures and understand concepts of area						
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show that the area is the same as would be found by multiplying the side lengths.  3.MD.7.8. Multiply side lengths to find areas of rectangles with whole-number side integrits in the control of a kb and or KL by a responsibly side lengths in the control of a kb and or KL by a responsibly side lengths and the control of a kb and or KL by a responsibly side lengths and the control of a kb and or KL by a responsibly side lengths and the control of a kb and or KL by a responsibly side lengths and back is the sum of a kb and or KL by a responsibly side lengths and back is the sum of a kb and or KL by a responsibly side lengths and back is the sum of a kb and or KL by a responsibly side lengths and back is the sum of a kb and or KL by a responsibly side lengths and back is the sum of a kb and or KL by a responsibly side lengths and back is the sum of a kb and or KL by a responsibly side lengths and back is the sum of a kb and or KL by a responsibly side lengths in the sum of a kb and or KL by a responsibly side lengths and back is the sum of a kb and or KL by a responsibly side lengths in the sum of a kb and or KL by a responsibly side lengths in the sum of a kb and or KL by a responsibly side lengths in the sum of a kb and or KL by a responsibly side lengths in the sum of a kb and or KL by a responsibly side lengths in the sum of a kb and or KL by a responsibly side lengths in the sum of a kb and or KL by a responsibly side lengths in the sum of a kb and or KL by a responsibly side lengths in the sum of a kb and or KL by a responsibly side lengths in the sum of a kb and or KL by a responsibly side lengths in the sum of a kb and or KL by a responsibly side lengths in the sum of a kb and or KL by a responsibly side lengths in the sum of a kb and or KL by a responsibly side lengths in the sum of a kb and or KL by a responsibly side lengths in the sum of a kb and or KL by a responsibly side lengths in the sum of a kb and or KL by a responsibly side lengths in the sum of a kb and or KL by a responsibly side lengths in th							
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tengths in the context of solving real world and mathematical problems, and represent whole number products as rectangled areas in mathematical reasoning.  3.MD.7.c. Use tiling to show in a concrete case that the area of a rectangle with whole number products as rectangled and the first account of the state of the composing temperature of the product as preclamptal and the first account of the state of the composing temperature of the product of the state of the composing corts, applying this technique to solve real-world problems.  CUSTER: Geometric measurement: recognize perimeter as an attribute of plane figures, and distinguish between linear and area measures.  CUSTER: Geometric measurement: recognize perimeter as an attribute of plane figures, and distinguish between linear and area measures.  CUSTER: Geometric measurement: recognize perimeter as an attribute of plane figures, and distinguish between linear and area measures.  AND. 8. Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different areas or with the same area and different areas or with the same and others, may share attributes (e.g., howing four side), and that the shared attributes can define a larger category (e.g., quadriaterals). Recognize membranes, rectangles, and others) may share attributes (e.g., having four side), and that the shared attributes can define a larger category (e.g., quadriaterals). Recognize membranes, rectangles, and others) may share attributes (e.g., having four side), and that the shared attributes can define a larger category (e.g., quadriaterals). Recognize membranes, rectangles, and others) may share attributes (e.g., having four side), and that the shared attributes can define a larger category (e.g., quadriaterals). And the warming of quadriaterals that do not belong to any of these subcategories.  E.3.	<b>3.MD.7.b</b> . Multiply side lengths to find areas of rectangles with whole-number side						
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wholenumber side lengths a and b + c is the sum of a x b and a x - Use area models to represent the distributive property in mathematical reasoning.  3.MD.7.d. Recognize area as additive. Find areas of the non overlapping parts, applying this technique to solve real-world problems.  CLUSTER: Geometric measurement: recognize perimeter as an attribute of plane figures, and distinguish between linear and area measures.  CLUSTER: Geometric measurement: recognize perimeter as an attribute of plane figures, and distinguish between linear and area measures.  CLUSTER: Geometric measurement: recognize perimeter as an attribute of plane figures, and distinguish between linear and area measures.  CLUSTER: Reason with shapes and their attributes  2 the number of sides to describe or according to the number of sides to describe or according to the number of sides to describe or according to the number of sides to describe or according to a squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not boiling to any other securities and the shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal areas.  CLISTER: Reason with shapes and their attributes (e.g., having four sides), and that the shared attributes on a define a larger category (e.g., quadrilaterals), and draw examples of quadrilaterals that do not boiling to any of these subcategories.  E.3.G.1. Describe attributes of two-dimensional shapes.  E.3.G.2. Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal areas.  E.3.G.1. The student can prograte sides or angles in two dimensional shapes.  Classrot describe the area of each part as 1/4 of the area of the shape.  Classrot describe the area	whole-number products as rectangular areas in mathematical reasoning.			Y			
wholenumber side lengths a and b + c is the sum of a k b and a x c. Use area models to represent the distributive propriety in mathematical reasoning.  3.MD.7.d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non overlapping prectangles and adding the areas of the non overlapping parts, applying this technique to solve real-world problems.  CLUSTER: Geometric measurement: recognize perimeter as an attribute of plane figures, and distinguish between linear and area measures.  CLUSTER: Geometric measurement: recognize perimeter as an attribute of plane figures, and distinguish between linear and area measures.  CLUSTER: Geometric measurement: recognize perimeter as an attribute of plane figures, and distinguish between linear and area measures.  AND.8. Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.  Third Grade Mathematics Domain: Geometry  CLUSTER: Reason with shapes and their attributes  3.G.1. Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and some squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.  2. E.3.G.H.1 The student can use the number of sides to describe or squares and exception as shape into parks, and draw examples of quadrilaterals that do not belong to any of these subcategories.  3.G.2. Partition shapes into parks with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal areas.  E.3.G.2. Recognize that shapes can be partitioned into equal areas. Express the area of each par	<b>3.MD.7.c.</b> Use tiling to show in a concrete case that the area of a rectangle with						
3.MD.3. Solve real world and mathematical problems in one-overlapping control problems.  CLUSTER: Geometric measurement: recognize perimeter as an attribute of plane figures, and distinguish between linear and area measures.  3.MD.3. Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.  3.G.1. Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and solutions of the whole. For example, partition a shape into parts with equal areas, and distributed from the whole. For example, partition a shape into a shape into a shape.  Claim 1: Students demonstrate increasingly complex understanding of number sense. Claim 2: Students demonstrate increasingly complex spatial reasoning and understanding of geometric principles.  CLISTER: Reason with shapes and their attributes  E.3.G.1. The student can use the number of sides to describe or angles in two dimensional shape.  E.3.G.1. The student can partition of sides to describe or angles in two dimensional shape.  E.3.G.1. The student can partition of sides to describe or angles in two dimensional shape.  E.3.G.1. The student can partition a shape into labers, third, and fourths.  E.3.G.1. The student can partition a shape into labers, third, and fourths.  E.3.G.1. The student can partition a shape into labers, third, and fourths.  E.3.G.1. The student can par	wholenumber side lengths a and b + c is the sum of a $\times$ b and a $\times$ c. Use area models to						
them into non overlapping rectangles and adding the areas of the non overlapping parts, applying this technique to solve real-world problems.  CLUSTER: Geometric meters recognize perimeter as an attribute of plane figures, and distinguish between linear area measures.  3.MD.8. Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different areas or with the same area and different rectangles with the same perimeter and different areas or with the same area and different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and category can be partition as a partition and an apparation and partition as shap							
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3.MD.8. Solve real world and mathematical problems involving perimeters of polygons, and chibiting finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.  Third Grade Mathematics Domains: Geometry  CLUSTER: Reason with shapes and their attributes  3.G.1. Understand that shapes in different categories (e.g., chombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and soluries a swapples of quadrilaterals, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and soluries are category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and soluries are category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and soluries are category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and soluries, a square, and a triangle. Indicate, a square, and a triangle. Indicate, a square, and a triangle. Indicate, and the problems into have squares as examples of quadrilaterals. The student can recognize that a circle and a rectangle can be partitioned into equal areas. Hinted to halves and fourths.  Es.3.G.1.2 The student can recognize that a circle and a rectangle can be partitioned into equal areas. Hinted to halves and fourths.  Es.3.G.1.2 The student can recognize on half of a shape.  Classroed the area of each part as 1/4 of the area of the shape.  Cl							
3.MD.8. Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.  Third Grade Mathematics Domain: Geometry  CLUSTER: Reason with shapes and their attributes  3.G.1. Understand that shapes in different categories (e.g., thombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can others) may share attributes (e.g., having four sides), and that the shared attributes can others) may share attributes (e.g., having four sides), and that the shared attributes can others) may share attributes (e.g., having four sides), and that the shared attributes can others) may share attributes (e.g., having four sides), and that the shared attributes can others) may share attributes (e.g., having four sides), and that the shared attributes can others) may share attributes (e.g., having four sides), and that the shared attributes can others) may share attributes (e.g., having four sides), and that the shared attributes can others) may share attributes (e.g., having four sides), and that the shared attributes can others) may share attributes (e.g., having four sides), and that the shared attributes can others) may share attributes (e.g., having four sides), and that the shared attributes can others attributes of two-dimensional shapes.  E.3.G.1. Describe attributes of two-dimensional shapes.  E.3.G.2. Pactition shapes into parts with equal areas. Express the area of each part as a until traction of the whole. For example, partition a shape into halves, and fourths.  E.3.G.1. The student can recognize that a circle and a rectangle can be partitioned into equal areas. Initiated to halves and fourths.  E.3.G.1. The student can recognize that a circle and a rectangle can be partitioned into equal areas. Initiated to halves and fourths.  E.3.G.1. The student							
including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.    Third Grade Mathematics Domain: Geometry	CLUSTER: Geometric me	asurement: recognize perimeter as an attribute of plane f	igures, a	and distinguish between linear	and area measures.		
3.G.1. Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.  E.3.G.1. Describe attributes of two-dimensional shapes.  E.3.G.1. Describe attributes of two-dimensional shapes.  E.3.G.1. Describe attributes of two-dimensional shapes.  E.3.G.1. The student can identify a circle, a square, and a triangle.  Classrot dientify a two-dimensional shapes.  E.3.G.M.1 The student can recognize sides or angles in two dimensional shapes.  E.3.G.M.2 The student can partition a shape into halves, thirds, and fourths.  E.3.G.M.2 The student can partition a shape into halves, thirds, and fourths.  E.3.G.L.2 The student can partition a shape into halves, thirds, and fourths.  Classrot dientify a two-dimensional shapes.  Classrot dientify a two-dimensional shapes.  E.3.G.M.2 The student can partition a shape into halves, thirds, and fourths.  E.3.G.L.2 The student can partition a shape into halves, thirds, and fourths.  Classrot dientify a two-dimensional shapes.  Classrot dientify a two-dimensional shapes.  E.3.G.M.2 The student can recognize that a circle and a recognize that circle and a recognize that straigle can be partitioned into equal areas, limited to halves and fourths.  E.3.G.L.2 The student can partition a shape into halves, thirds, and fourths.  Classrot dientify a two-dimensional shapes.  E.3.G.M.2 The student can partition a shape into halves, thirds, and fourths.  E.3.G.L.2 The student can recognize one half of a shape.  Classrot dientify a two-dimensional shapes.  E.3.G.M.2 The student can partition a shape into halves, thirds, and fourths.	including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same			NA	NA	NA	NA
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	unit fraction of the whole. For example, partition a shape into 4 parts with equal area,			partition a shape into halves,	recognize that a circle and a rectangle can be partitioned into equal areas, limited to halves and		Classroom/State
	Claim 1: Students demonstrate increasingly complex understanding of number sense. Cla	aim 2: Students demonstrate increasingly complex spatial re	easoning	g and understanding of geometr	ic principles.		
Claim 3: Students demonstrate increasingly complex understanding of measurement, data and analytic procedures. Claim 4: Students solve increasingly complex mathematical problems, making productuve use of algebra and functions.					•		
			ngly cor	mplex mathematical problems, n	naking productuve use of algebra	and functions.	

<sup>\*</sup>Dynamic Learning Maps Consortium (2013). Dynamic Learning Maps Essential Elements for Mathematics. Lawrence, KS: University of Kansas.

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